

diabetes/100,000) were identified, projecting to a national ESI rate of 4814/100,000. Over half of all diabetics had drug treatment; 854.6/100,000 with insulin, 1,536.1/100,000 with sulfonylurea, and 2,427.6/100,000 with other treatments, including metformins, TZDs, and combination products. Annual health care expenditures for diabetics, with or without drug treatment, was \$14,138. Annual expenditures were \$23,223, \$14,045, and \$13,252, for patients treated with insulins, sulfonylureas, and other treatments, respectively. **CONCLUSION:** Reliable estimates of the prevalence, treatment and cost of diabetes and other conditions, are valuable to policy makers, providers, and payers. Individuals with ESI represent over 56% of the U.S. population, a large group with fewer cost barriers to care. This study demonstrates a reliable projection methodology for estimating disease prevalence, treatment events, and costs associated with any disease or condition based on a large convenience sample of health care claims data.

PODIUM SESSION III: MENTAL HEALTH

MHI

OUTCOMES ASSOCIATED WITH THE IMPLEMENTATION OF A DOSE OPTIMIZATION PROGRAM FOR ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN A MANAGED CARE ORGANIZATION

Dunn JD¹,* Cannon HE¹, Nelson JC², Olson BM³

¹Select-Health, ²Eli Lilly and Company, ³Dymaxium Inc.

OBJECTIVES: To evaluate the impact of identifying and intervening upon inefficient dosing practices related to atypical antipsychotics in a large commercial managed care organization. **METHODS:** An analysis using the Interactive Prescribing Efficiency Tool (iPET) was conducted to identify inefficient prescribing among atypical antipsychotics. Pill combinations used to reach all daily doses for the atypicals were identified and baseline opportunity cost savings calculated. A pharmacy claims edit was instituted for all atypicals on July 1, 2004. Prescriptions were flagged at the pharmacy level if inefficient dosing was present and automatic optimization of regimens was implemented based on predetermined algorithms. The iPET was used to reevaluate the success of this intervention at improving economic outcomes. **RESULTS:** We identified 1215 patients receiving an atypical antipsychotic during the pre-intervention period (aripiprazole n = 153; olanzapine n = 284; quetiapine n = 469; risperidone n = 289; ziprasidone n = 81). Some patients may have received multiple atypicals. Inefficient pill combinations may have been received by 7.8%, 18.7%, 27.9%, 27.7%, and 23.5% of aripiprazole, olanzapine, quetiapine, risperidone, and ziprasidone patients, respectively. An opportunity savings of \$157,401 in overall atypical antipsychotic expenditures was estimated (if up to 70% of inefficient doses were converted to more efficient pill combinations). In the period after the dose optimization program had been implemented, we identified 1166 patients as receiving an atypical (aripiprazole n = 158; olanzapine n = 258; quetiapine n = 463; risperidone n = 250; ziprasidone n = 80). During this period, inefficient pill combinations may have been received by 4.4%, 8.5%, 38.9%, 10.0%, and 20% of aripiprazole, olanzapine, quetiapine, risperidone, and ziprasidone patients, respectively. The opportunity savings dropped to \$58,385 indicating a costs savings of \$99,016 following the implementation of the dose optimization intervention. **CONCLUSIONS:** Substantial improvements in economic outcomes were realized through an intervention focused on increasing prescribing efficiency among the atypical antipsychotics.

MH2

COMPARISON OF HEALTH CARE COSTS AND HOSPITALIZATION DAYS OF ELDERLY MAJOR DEPRESSIVE DISORDER PATIENTS TREATED WITH ESCITALOPRAM AND OTHER ANTIDEPRESSANTS

Wu E¹, Yang E¹, Greenberg P¹, Erder MH², Yu AP¹, Buesing M¹

¹Analysis Group, Inc, Boston, MA, USA, ²Forest Research Institute, Jersey City, NJ, USA

OBJECTIVES: To compare the health care costs and hospitalization days of elderly major depressive disorder (MDD) patients treated with escitalopram to those treated with other SSRI/SNRI. **METHODS:** Elderly MDD patients (age ≥65) initiated on escitalopram or other SSRI/SNRI were identified in the IHCS National Managed Care Database (2003–2005). Health care costs and hospitalization days were compared between patients on escitalopram to those on other SSRI/SNRI over 6 months following therapy initiation (study period). Wilcoxon tests were used to compare the costs descriptively. Diff-in-diff analyses were conducted to control for baseline (the 6 months prior to therapy initiation) costs. GLM regression with log link function was used for total health care cost comparison. Negative binomial regression was used to compare the number of hospitalization days. Both regressions adjusted for patient demographics, comorbidities, and medical resource use at baseline. Costs were inflation adjusted to 2005 US dollars. **RESULTS:** The study sample included 459 elderly MDD patients initiated on escitalopram and 1517 patients initiated on other SSRI/SNRI. Descriptive analyses showed that patients on escitalopram had \$2143 lower six-month total health care costs than patients on other SSRI/SNRI (p = 0.398), and about half of the difference was from lower hospitalization costs (\$1271, p = 0.145). After adjusting for baseline costs using the diff-in-diff method, the difference in total health care costs became significant (\$2319, p = 0.037), and about one third of the difference was from lower hospitalization costs (\$806, p = 0.036). The GLM regression showed that the six-month total health care costs of patients on escitalopram was \$3120 less than patients on other SSRI/SNRI (p = 0.001). Negative binomial regression showed that patients on escitalopram had 39% less hospitalization days (p = 0.004). **CONCLUSION:** Compared to elderly MDD patients initiated on other SSRI/SNRI, patients who initiated escitalopram have lower health care costs and less hospitalization.

MH3

PREVALENCE OF LIVER DISEASES IN MEDICAID RECIPIENTS WITH SCHIZOPHRENIA

Wu JH¹, Dickson M², Durkin M¹, Canuso CM³

¹Ortho-McNeil Janssen Scientific Affairs, LLC, Titusville, NJ, USA,

²University of South Carolina, College of Pharmacy, Columbia, SC,

USA, ³Janssen Medical Affairs, LLC, Titusville, NJ, USA

OBJECTIVES: Patients with schizophrenia commonly suffer from clinically relevant co-morbidities, including alcoholism, substance abuse, and hepatitis, that may compromise hepatic function. The study was designed to evaluate the prevalence of liver diseases in patients with schizophrenia as compared to non-mentally ill controls. **METHODS:** South Carolina State Medicaid program data were analyzed. Patients <65 years, with a schizophrenia diagnosis (ICD-9CM) from January 2002 to December 2003 were identified. A 4:1 random selection algorithm (4 without diagnosis to 1 with diagnosis) was applied. Prevalence of liver diseases was assessed from ambulatory or hospital claims over the 24-month period (January 2004–December 2005) and compared between the two groups. The liver disease related ICD-9CM codes included 570–573.xx, 070.xx, 782.4, 790.4, 794.8 for acute liver disease, alcoholic